

Date: Sun, 7 Feb 93 12:13:51 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #182  
To: Info-Hams

Info-Hams Digest                      Sun, 7 Feb 93                      Volume 93 : Issue 182

Today's Topics:

Daily Solar Geophysical Data Broadcast for 05 February  
Proposition (2 msgs)  
rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)  
Spread the word--CANCER-CELL PHONES-SCANNERS  
Valor Pro-Am mag-mount antenna comments?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 7 Feb 93 19:39:42 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 05 February  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 036, 02/05/93  
10.7 FLUX=160.1 90-AVG=135 SSN=168 BKI=1132 1222 BAI=006  
BGND-XRAY=B8.7 FLU1=1.2E+06 FLU10=9.7E+03 PKI=2132 1223 PAI=008  
BOU-DEV=006,006,023,012,006,017,014,011 DEV-AVG=011 NT SWF=01:010  
XRAY-MAX= M1.0 @ 0538UT XRAY-MIN= B6.5 @ 1933UT XRAY-AVG= C1.7  
NEUTN-MAX= +003% @ 2310UT NEUTN-MIN= -002% @ 1000UT NEUTN-AVG= +0.2%  
PCA-MAX= +0.1DB @ 1905UT PCA-MIN= -0.2DB @ 0625UT PCA-AVG= +0.0DB  
BOUTF-MAX=55414NT @ 2339UT BOUTF-MIN=55391NT @ 1813UT BOUTF-AVG=55408NT  
GOES7-MAX=P:+120NT@ 1949UT GOES7-MIN=N:+005NT@ 0555UT G7-AVG=+079,+031,+011  
GOES6-MAX=P:+129NT@ 1949UT GOES6-MIN=E:-008NT@ 2212UT G6-AVG=+090,+003,+042  
FLUXFCST=STD:155,155,155;SESC:155,155,155 BAI/PAI-FCST=010,010,010/010,010,010  
KFCST=0005 5020 0005 5020 27DAY-AP=014,028 27DAY-KP=3333 3333 2475 4311  
WARNINGS=\*SWF

ALERTS=\*\*MINFLR:M1.0@0538UTC  
!!END-DATA!!

-----  
Date: 7 Feb 93 15:37:00 GMT  
From: usc!cs.utexas.edu!asuvax!ncar!csn!ub!acsu.buffalo.edu!ubvmsb.cc.buffalo.edu!  
v111qheg@network.UCSD.EDU  
Subject: Proposition  
To: info-hams@ucsd.edu

In article <1993Feb7.110915.4089@nnnnpd2.cxo.dec.com>, little@nuts2u.enet.dec.com  
(nuts2u::little) writes...

>v111qheg@ubvmsb.cc.buffalo.edu (P.VASILION) writes:

>

>>test of their knowledge of what their priveleges are. Furthermore, to operate  
>>on the HF bands below 10 meters, one STILL hase to take an additional 25  
>>question written exam. The code test does not directly relate to the phone

>

>That simply isn't true. A technician class license requires elements 2 and  
>3A (55 questions total I think). To obtain HF privileges, all that is  
>required is passing element 1A (5 WPM "proficiency"). No additional  
>written examination is required.

Wrong again. This from the FCC Rule Book:

Novice: Element 1A (5wmp code) and Element 2 (theory)

Tech: Element 2 and 3A (theory)

General: Element 1B (13WPM code), Elements 2, 3A \*AND\* 3B (General theory)

Advanced: All previous exams PLUS Element 4A (Adv. Theory)

Extra: All previous exams, Element 1C (20WPM code) and Element 4B (Extra theory)

>>One last point: We STILL need the incentive licensing program. If you remove  
>>code or make the exams reflect priveleges granted, we would loose the  
>>incentive program and the bands would be flooded by LIDS who really dont know  
>>square one about Ham Radio.

>

>>If I sound like an OF, forgive me. I'm 18 and was licensed two years ago.  
>>I hope to have 50 more years of enjoyable ham radio in my life and I am  
>>trying to preserve the quality of the hobby. A license is something that you  
>>should have the UTMOST respect for. It is not YOUR RIGHT to transmit where  
>>ever you want to. You must demonstrate your respect for other people's  
>>rights on the bands as well.

>

>Like I said in a previous post, OF has little to do with age. And you're  
>right, it is not someone's right to transmit where ever they want to. But  
>just like they don't teach starting a car with a hand crank in driver  
>education, why are we forcing one mode over all others? Those auto  
>enthusiasts that still have hand crank star automobiles are welcome to do  
>that, but we don't force everyone to know how to do that.

Most people start out in the hobby with a dislike for the code. I have  
seen, that as time progresses, people tend to go back to the code for whatever  
reason. The code exams expose the new ham to CW. If you eliminated the CW exams  
no very many hams would take the time to try it, and thus fewer people on the  
CW subbands. I always enjoy a QSO with a new face in thoes subbands.

>Todd  
>N9MWB

>PS Get a spelling checker, whew.

Well, my VAX text editor doesn't have one to use. Also, if you are so  
concerned with spelling, you would never last on RTTY and CW --> No spell  
checkers! :-)

Nuff Said on this thread.

73,

SK de KB2NMV dit dit

-----  
Date: Sun, 7 Feb 1993 12:09:39 GMT  
From: pa.dec.com!engage.pko.dec.com!nntpd.lkg.dec.com!nntpd2.cxo.dec.com!  
nuts2u.enet.dec.com!little@decwrl.dec.com  
Subject: Proposition  
To: info-hams@ucsd.edu

v111qheg@ubvmsb.cc.buffalo.edu (P.VASILION) writes:

>test of their knowledge of what their priveleges are. Furthermore, to operate  
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3A (55 questions total I think). To obtain HF privileges, all that is  
required is passing element 1A (5 WPM "proficiency"). No additional  
written examination is required.

>force an examinee to be committed to ham radio. Anyone can pass the theory

>exams (notice the # of extras who are below the age of 12). The code requires

Well there have been a number of posts indicating the opposite, i.e. that harder theory exams would rule out the younger ham. From the little bit of amateur radio information I've passed along to my 7 year old daughter, it is clear that she could much more easily pass any or all of the Morse code elements before she'd be able to pass the theory portions. She simply doesn't have the necessary math background to handle many of the questions. A basic knowledge of Algebra is required for some questions that that isn't available to most students until at least 8th grade.

>One last point: We STILL need the incentive licensing program. If you remove  
>code or make the exams reflect privileges granted, we would lose the  
>incentive program and the bands would be flooded by LIDS who really don't know  
>square one about Ham Radio.

Nonsense. The nocode license has been in effect for 2 years and the airways are certainly not any more flooded with lids than they were before. As several have mentioned, the biggest lids have already passed their code tests. I have yet to come across anything at all on the upper bands where you're so called flood of lids should exist, that compares with the chaos that exists on certain portions of the lower bands.

And why do we need incentive licensing? Shouldn't interest in the hobby, and support and encouragement from other hams be enough incentive? Besides, what has incentive licensing done for the hobby? What other country has the convoluted scheme of licenses that we have?

>If I sound like an OF, forgive me. I'm 18 and was licensed two years ago.  
>I hope to have 50 more years of enjoyable ham radio in my life and I am  
>trying to preserve the quality of the hobby. A license is something that you  
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>rights on the bands as well.

Like I said in a previous post, OF has little to do with age. And you're right, it is not someone's right to transmit where ever they want to. But just like they don't teach starting a car with a hand crank in driver education, why are we forcing one mode over all others? Those auto enthusiasts that still have hand crank star automobiles are welcome to do that, but we don't force everyone to know how to do that.

I'd love to see licensing get tougher. Then perhaps we wouldn't have all these stupid myths about SWR, or PL259s, or feedline losses, etc. continuing to be propagated. Or maybe I wouldn't see things like packets from station NOCALL, or stations finding their downlink on OSCAR with key down. I'd like to see things like courtesy, helpfulness, etc. also be part of the

licensing requirements, but I like to dream a lot too.

Unfortunately this whole argument is pointless, because as has been mentioned before, most hams seem to have their minds made up about this. The discussion is at best a means of demonstrating debating skills and little else. Only by pressuring the FCC will any of this mean anything.

73,  
Todd  
N9MWB

PS Get a spelling checker, whew.

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Date: 7 Feb 93 11:09:02 GMT  
From: pacbell.com!amdahl!amdahl!uts.amdahl.com@network.UCSD.EDU  
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)  
To: info-hams@ucsd.edu

Posted-By: auto-faq 2.4  
Archive-name: radio/ham-radio/faq/part1  
Revision: 3.5 02/05/93 14:12:41

Rec.radio.amateur.misc Frequently Asked Questions  
Part 1 - Introduction to the FAQ and Amateur Radio  
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This is a regular posting of frequently-asked questions (FAQ) about Amateur Radio, also known as Ham Radio. It is intended to summarize some common questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them. If you are a new user, please print and review the FAQ articles and look at the instructions in the news.newusers newsgroup before posting any articles. If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

To reduce the size of each article, the FAQ information is posted in 3 parts:  
Part 1 - Introduction to the FAQ and Amateur Radio

Part 2 - Amateur Radio Organizations, Services, and Information Sources  
Part 3 - Amateur Radio Advanced and Technical Questions

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(pre-4/92)

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### --Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

#### \*\* Introduction to the FAQ

##### \* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider the following criteria:

- is it a commonly asked question?
- will its inclusion help reduce the usage of network bandwidth?
- how useful is it to beginning Hams or to the majority of Hams?

Contributions don't have to meet all of these but the minimum is one.

We actually only ask that you consider these before contributing.

We can't necessarily include every question or every topic - the network simply doesn't have enough bandwidth to carry that much information. Besides, the point is that we're trying to conserve network bandwidth. You can find the locations of much more information by referring to the "Index to the rec.radio.amateur.\* Supplemental Archives" posted monthly by Paul Schleck KD3FU.

If you suggest a question for this FAQ, please include the answer. You'll get credit for your contribution and you'll speed up the process of getting the information ready for distribution.

If you feel your contribution is sufficient to meet the considerations shown above, send it to [hamradio-faq@amdahl.com](mailto:hamradio-faq@amdahl.com) so that it will reach all the FAQ coordinators: (listed in alphabetical order)

Diana L Carlson	KC1SP	dls@genrad.com	(Hudson, NH, USA)
Ed Hare	KA1CV	ehare@arrl.org	(Newington, CT, USA)
Ian Klufft (editor)	KD6EUI	iklufft@uts.amdahl.com	(San Jose, CA, USA)
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Chris Swartout	N6WCP	cas30@uts.amdahl.com	(San Jose, CA, USA)
Rosalie White	WA1STO	rwhite@arrl.org	(Newington, CT, USA)
Derek Wills	AA5BT	oo7@astro.as.utexas.edu	(Austin, TX, USA)

#### \* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson's work or her editing of a contributor's work. Diana established this FAQ. She is now one of the larger group that maintains it but we didn't want her effort to be lost in the crowd.

#### \* Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- \* If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now.
- \* When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
- \* As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but



be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.

- \* Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- \* Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- \* If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
- \* Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
- \* If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- \* Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.\* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

\*\* What is Amateur Radio?

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

\*\* Who can become a ham in the United States?

Anyone who is not a representative of a foreign government can

be an Amateur Radio operator in the USA. There are tests that you must pass to get a license, however the tests are not insurmountable.

- \*\* Where can I locate information and books on Amateur Radio?  
Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

- \*\* How much does it cost?  
To take the Novice tests, it's free. To take the Technician or higher class tests, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

- \*\* Where can I take the tests?  
The Novice tests can be given by any two qualified hams of General class license or above. The Technician tests and all higher class license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

- \*\* What are the tests like?  
First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen

and two pencils; the applicable examination fee (around \$5-\$6 for 1992); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

★★ What can I do with a ham radio license?

There are so many things, it's a difficult question to answer, but here's some ideas:

- \* Talk to people in foreign countries.
- \* Talk to people (both local and far away) on your drive to work.
- \* Help in emergencies by providing communications.

- \* Provide communications in parades or walkathons.
- \* Help other people become hams.
- \* Hook your computer to your radio and communicate by computers.
- \* Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- \* Participate in contests or Field Day events.
- \* Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- \* Aid members of the US military by joining MARS (Military Affiliate Radio System).
- \* Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- \* Have someone to talk to on those sleepless nights at home.
- \* Receive weather pictures via satellites.
- \* Build radios, antennas, learn some electronics and radio theory.
- \* Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- \* Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
- \* Experiment with amateur satellite communications.

\*\* What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

\*\* I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to  
 elmers-request@unomaha.edu

\*\* Should I build my own equipment or antenna?

"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a home-

brew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

$$\text{wavelength (in meters)} = 300 / \text{frequency (in megahertz)}$$

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

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Date: Sun, 7 Feb 1993 05:51:14 GMT  
From: dog.ee.lbl.gov!hellgate.utah.edu!caen!sdd.hp.com!ncr-sd!ncrcae!ncrhub2!  
ncrgw2!psinntp!calspan!calspan.com!calinski@network.UCSD.EDU  
Subject: Spread the word--CANCER-CELL PHONES-SCANNERS  
To: info-hams@ucsd.edu

Spread the word!!!!

The reason Congress is banning the sale of scanners that tune to the cell phone frequencies is to prevent the public from finding out how much power is really being transmitted by the cell phones.

Congress is in bed with the cell phone companies. Consumers need to get up in arms about this scanner ban.

Spread the word.

(And try to keep a straight face when you do it)

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Date: Sat, 6 Feb 1993 22:06:25 GMT  
From: spool.mu.edu!howland.reston.ans.net!usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!bgsuvax!att!att!dptg!ulysses!ulysses.att.com!wmb@decwrl.dec.com  
Subject: Valor Pro-Am mag-mount antenna comments?  
To: info-hams@ucsd.edu

Any comments on the tiny Pro-Am 2m/70cm mag mount antenna?  
Is it as good as the December 73 write-up? I'm wondering  
if it's time to buy something small to replace my medium-  
size non-spouse-pleasing homemade mag mount for use in rental  
cars, etc. But at \$49.95, I want to be sure it's good..

Thanks,

Bill Brelsford, K2DI  
wmb@joplin.att.com

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End of Info-Hams Digest V93 #182  
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